

THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION

Recovery Team	Great Southern District Threatened Flora & Communities Recovery Team
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Reporting Period	Calendar year 2011
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Current membership

	Member	Representing
1. Chair	Peter Lacey	DEC Great Southern District, Narrogin
2.	Greg Durell	DEC Great Southern District, Narrogin
3.	Brett Beecham	DEC Wheatbelt Region
4	Andrew Brown	DEC Species and Communities Branch
5.	Anne Rick	Lakes District Rare Flora Group, Landholder
6	Jill Richardson	NRM Groups – Katanning Landcare Zone, Blackwood Basin Group
7	Peter Denton	Transport and Utilities Main Roads WA – Narrogin (Wheatbelt South)
8	Val Crowley	Volunteer/Community Groups
9	Judy Williams	Volunteer/Community Groups
10	Anne Cochrane	DEC Science Division, Flora Conservation and Herbarium Program
11	Bob Dixon	Botanic Gardens and Parks Authority
12	Wendy Chow	DEC Species and Communities Branch
13	Julian Murphy	Local Government Authorities

Dates meetings were held	February 1 st 2011.
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One to two paragraph summary of achievements suitable for *WATSNU*

The GSD Recovery Team members discovered an additional eight populations of threatened flora and three populations of priority flora. Six fences were erected on private property to assist protection from damage by stock and rabbit activity to populations of nine threatened flora taxa. Research on the fire response of three taxa confirmed two of these to be resprouters and resulted in additional recruitment into the population of an obligate seeder. Two studies were undertaken on the delineation of threatened flora and papers are in preparation. Numerous surveys were undertaken of threatened flora populations throughout 2011 in the Great Southern District and the information collated to help prioritise management actions.

List of actions undertaken by Recovery Team members

KEY ACTIONS																																													
<p>Action 1</p>	<p>Surveying/monitoring –</p> <p>The ongoing employment of a dedicated project officer has seen the population survey of most species included within the CFOC project:</p> <p><i>Adenanthos pungens</i> subsp. <i>effusus</i> <i>Banksia cuneata</i> <i>Banksia oligantha</i> <i>Conostylis drummondii</i> <i>Conostylis setigera</i> subsp. <i>dasys</i> <i>Gastrolobium lehmannii</i> <i>Goodenia integerrima</i> <i>Grevillea scapigera</i> <i>Hakea aculeata</i> <i>Ptilotus fasciculatus</i> <i>Tribonanthes purpurea</i> <i>Verticordia fimbrilepis</i> subsp. <i>fimbrilepis</i> <i>Verticordia staminosa</i> var. <i>cylindracea</i></p> <p>76 populations of threatened and priority flora taxa not included in the CFOC project were also surveyed:</p> <table data-bbox="475 1048 1217 1823"> <thead> <tr> <th data-bbox="475 1081 560 1111">Taxon</th> <th data-bbox="1013 1048 1166 1111">Number of populations</th> </tr> </thead> <tbody> <tr><td><i>Acacia auratiflora</i></td><td>18</td></tr> <tr><td><i>Acacia cochlocarpa</i> ssp <i>cochlocarpa</i></td><td>1</td></tr> <tr><td><i>Acacia depressa</i></td><td>14</td></tr> <tr><td><i>Acacia insolita</i> ssp <i>recurva</i></td><td>1</td></tr> <tr><td><i>Acacia languinophylla</i></td><td>6</td></tr> <tr><td><i>Adenanthos pungens</i> ssp. <i>effusus</i></td><td>2</td></tr> <tr><td><i>Adenanthos velutinus</i></td><td>1</td></tr> <tr><td><i>Caladenia dorrienii</i></td><td>1</td></tr> <tr><td><i>Caladenia melanema</i></td><td>2</td></tr> <tr><td><i>Conostylis drummondii</i></td><td>1</td></tr> <tr><td><i>Eremophila subteretifolia</i></td><td>7</td></tr> <tr><td><i>Eremophila verticillata</i></td><td>1</td></tr> <tr><td><i>Gonocarpus ericifolia</i> (P2)</td><td>1</td></tr> <tr><td><i>Grevillea dryandroides</i> ssp <i>hirsuta</i></td><td>2</td></tr> <tr><td><i>Grevillea involucrata</i></td><td>2</td></tr> <tr><td><i>Grevillea scapigera</i></td><td>4</td></tr> <tr><td><i>Hemigenia ramosissima</i></td><td>3</td></tr> <tr><td><i>Pultenaea pauciflora</i></td><td>4</td></tr> <tr><td><i>Rhizanthella gardnerii</i></td><td>1</td></tr> <tr><td><i>Tetralthea aphylla</i> ssp. <i>megacarpa</i></td><td>3</td></tr> <tr><td><i>Trymalium monospermum</i></td><td>1</td></tr> </tbody> </table> <p>Installed monitoring quadrats at <i>Acacia insolita</i> ssp. <i>recurva</i> population 1, <i>Eremophila subteretifolia</i> population 6, <i>Eremophila verticillata</i> population 2, <i>Verticordia fimbrilepis</i> ssp. <i>fimbrilepis</i> populations 4, 7, 12 and 14, <i>Conostylis drummondii</i> population 4, <i>Gastrolobium lehmannii</i> population 3 and <i>Tetralthea aphylla</i> population 1.</p>	Taxon	Number of populations	<i>Acacia auratiflora</i>	18	<i>Acacia cochlocarpa</i> ssp <i>cochlocarpa</i>	1	<i>Acacia depressa</i>	14	<i>Acacia insolita</i> ssp <i>recurva</i>	1	<i>Acacia languinophylla</i>	6	<i>Adenanthos pungens</i> ssp. <i>effusus</i>	2	<i>Adenanthos velutinus</i>	1	<i>Caladenia dorrienii</i>	1	<i>Caladenia melanema</i>	2	<i>Conostylis drummondii</i>	1	<i>Eremophila subteretifolia</i>	7	<i>Eremophila verticillata</i>	1	<i>Gonocarpus ericifolia</i> (P2)	1	<i>Grevillea dryandroides</i> ssp <i>hirsuta</i>	2	<i>Grevillea involucrata</i>	2	<i>Grevillea scapigera</i>	4	<i>Hemigenia ramosissima</i>	3	<i>Pultenaea pauciflora</i>	4	<i>Rhizanthella gardnerii</i>	1	<i>Tetralthea aphylla</i> ssp. <i>megacarpa</i>	3	<i>Trymalium monospermum</i>	1
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<p>Action 2</p>	<p>New populations –</p>																																												

	<p>6 new populations of <i>Acacia auratiflora</i> were found in the Lake Grace Shire.</p> <p>1 new population of <i>Tetratheca aphylla</i> and 1 new population of <i>Allocasuarina tortiramula</i> were found by the Lakes District Flora Group</p> <p>1 new population of <i>Adenanthos pungens</i> ssp. <i>effusus</i> was found at Beaufort River.</p> <p>3 new Priority flora populations - <i>Acacia insolita</i> subsp. <i>efoliata</i>, <i>Eucalyptus deflexa</i> and <i>Grevillea aneura</i></p> <p>Population extensions were recorded for <i>Eremophila subteretifolia</i> (pops 3 & 6)</p>
Action 3	<p>Rabbit control –</p> <p>Rabbit baiting program conducted at 21 populations of threatened flora. Baiting was undertaken in conjunction with fumigation at three of these populations and two roadside populations were fumigated.</p>
Action 4	<p>Seed collection – No seed was collected in 2011.</p>
Action 5	<p>Fencing –</p> <p>Rabbit-proof fences were erected on:</p> <p>Southern Aboriginal Corp property Marribank – <i>Banksia oligantha</i> population 2, <i>Conostylis drummondii</i> population 5 and <i>Adenanthos pungens</i> population 2.</p> <p>PP Loc 4861 at Boscabel – <i>Conostylis setigera</i> ssp. <i>dasys</i> population 1, <i>Conostylis drummondii</i> population 2.</p> <p>The Brownley's property at Pallarup – <i>Eremophila subteretifolia</i> population 9</p> <p>The Dixon's property at Pingrup – <i>Caladenia melanema</i> population 4</p> <p>PP Loc 8064 rabbit mesh was added to an existing fence surrounding <i>Gastrolobium lehmannii</i> population 1.</p> <p>PP, Loc 5757 near Wangeling NR – <i>Banksia oligantha</i> population 1</p>
Action 6	<p>Rare flora markers –</p> <p>Replaced and positioned rare flora markers as required.</p>
Action 7	<p>Community engagement/communication –</p> <p>Annual mail out to shires informing them of the current location of threatened flora and the purpose of DRF markers on lands vested in their shire and the assistance DEC can provide with management.</p> <p>Liaised with various local government representatives on best practice management of rare and threatened flora on roadsides.</p> <p>Development of a series of fridge magnets for four threatened species <i>Eremophila subteretifolia</i>, <i>Acacia insolita</i> ssp. <i>recurva</i>, <i>Adenanthos velutinus</i> and <i>Caladenia luteola</i> to be distributed to landowners via selected Post Offices in order to increase local community awareness and locate new populations. These are still in preparation.</p> <p>Jill Richardson and Anne Rick have continued to work with community volunteers throughout the year. Developing and maintaining the interest of the community in flora conservation.</p>
Action 8	<p>Translocations –</p> <p>Monitoring of <i>Hemigenia ramosissima</i> sites was undertaken by Bec Dillon (works with Leonie Monks).</p> <p><i>Grevillea scapigera</i> translocations monitored by Bob Dixon and Master Gardeners</p>

	from the Botanic Gardens and Parks Authority (BGPA)
Action 9	<p>Science & Research –</p> <p>Cuttings of <i>Banksia ionthocarpa</i> ssp. <i>chrysophoenix</i> were collected for propagation trials by BGPA. Unfortunately none were successfully propagated.</p> <p>An adaptive management project to investigate the effect of disturbance regimes and rabbit grazing on survival and recruitment of <i>Gastrolobium lehmannii</i> was implemented.</p> <p>Quadrats were monitored post-fire to investigate the effect of fire on <i>Acacia insolita</i> ssp. <i>recurva</i>, <i>Conostylis setigera</i> ssp. <i>dasys</i> and <i>Conostylis drummondii</i>. Data was analysed and reports sent to Species and Communities.</p> <p>Data collected on <i>Acacia insolita</i> ssp. <i>recurva</i> seed production and population dynamics in the late 1990's was analysed and a paper is in preparation (RT: Anne Cochrane, Leonie Monks, Kris Brooks).</p> <p>A taxonomic study of the <i>Adenanthos pungens</i> subspecies was undertaken and a paper is in review (RT: Andrew Brown)</p> <p>A morphological study of the <i>Banksia mucronulata</i> subspecies was undertaken and a paper is in preparation.</p>
Action 10	<p>TEC monitoring –</p> <p>Biannual TEC monitoring was undertaken at Lake Bryde by Wendy Chow and members of the Lake Bryde Recovery Team. Detailed monitoring of the threatened flora species <i>Muehlenbeckia horrida</i> ssp. <i>abdita</i> was undertaken as part of this process.</p>